



PROGRESS REPORT NO. 195

TO: Bonnie Arthur, U.S. Environmental Protection Agency (EPA) – via electronic mail
Robert Tan, EPA – via electronic mail

FROM: Denise Mills, Teck American Incorporated (TAI)

Cc: Kris McCaig, TAI – via electronic mail
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DATE: October 10, 2022

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study (RI/FS) –
Progress Report No. 195, Month Ending September 2022

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Soil Amendment Technology Evaluation Study (SATES)

- TAI submitted the draft interim data summary report (IDSR), which provides the data collected during the first year of field work completed for SATES Phases III and IV, to EPA and the SATES team for review on March 29, 2022. TAI led a call on April 19, 2022 that was focused on a review of the data collected and preliminary analysis of the results obtained to date. A technical call with EPA's SATES research team was held on June 13, 2022 to review and discuss the 2021 sampling results. TAI received comments from the Citizens for a Clean Columbia on both the IDSR and the statistical analysis summary on July 1, 2022, and comments from EPA on the statistical analysis summary on July 8, 2022. EPA and TAI held a call on August 17, 2022 to discuss EPA's comments. TAI received additional comments on the statistical analysis summary from EPA on September 15, 2022. TAI and EPA have agreed that comments on the IDSR will be addressed in the full DSR that will be prepared after all the field test data are available.
- TAI conducted the second round of 2022 soil sampling for the field test between July 18 and July 21, 2022. TAI submitted preliminary analytical results from the May 2022 sampling event to EPA on July 29, 2022.

Upland Baseline Ecological Risk Assessment (BERA) – TAI received Upland Lakes/Emergent Wetlands study questions and scope outline with expectations for an upland lakes study on May 6, 2022. Discussion between TAI and EPA regarding upland lakes continued through August. TAI provided a draft version of a letter requesting permission from private landowners to access lands around upland lakes for a reconnaissance survey to EPA for review on August 16, 2022. EPA provided suggested revisions on September 1, 2022 and TAI incorporated the revisions and send out the first round of permission letters on September 2, 2022. A second round of letters were mailed to owners who had not responded on September 20, 2022. As of this writing, TAI is coordinating with EPA to conduct a field reconnaissance trip on October 26 and 27, 2022 to view select upland lakes/wetlands identified by EPA as candidates for study. As of this writing, as per EPA's request, TAI captured aerial imagery of some upland lakes on October 6, 2022. This imagery will be provided to EPA for review prior to the October field reconnaissance trip.

Aquatic BERA

- As follow up to recent correspondence and a conference call between TAI and EPA regarding the data useability assessment for the aquatic BERA, EPA asked to see an updated aquatic BERA data summary table similar to Table 4-1 in the draft IP Upland BERA. TAI will provide this after receiving additional feedback from EPA regarding proposed aquatic datasets (e.g., white sturgeon sediment toxicity assessment study data).
- An Aquatic BERA scoping call between TAI and EPA was held on August 10, 2022. As discussed on that call, Category 1 files for the Aquatic BERA were transmitted to EPA via email on August 25, 2022. Category 2 files were transmitted to EPA on September 14, 2022, also via OneDrive file transfer.

Sediment Transport Study – TAI received study questions from EPA on April 29, 2022. A technical call between TAI and EPA was held on July 19, 2022 to discuss TAI's proposed approach for sediment transport modeling and for addressing EPA's study questions, many of which will be addressed in the Aquatic BERA, the Aquatic RI report, or in the Aquatic FS report. TAI and EPA held a follow-up call on August 24, 2022 to further discuss the sediment transport study, study questions, and scope. TAI and EPA agreed to proceed on two tracks with two work groups for discussions of technical aspects of hydrodynamic model development and sediment transport study data quality objectives. The first hydrodynamic modeling work group discussion was held on September 14, 2022 in which TAI presented model development work completed to date. TAI provided the materials presented to EPA via email on September 15, 2022.

Sediment Background Evaluation Technical Memorandum – The draft TM was provided to EPA for review, via OneDrive, on September 22, 2022.

Upland RI Report – TAI received EPA's final comments on the pre-draft RI report (Draft IP Upland RI Report) on April 1, 2022. TAI submitted its RTC to EPA on July 1, 2022 and received EPA's responses on September 20, 2022. During a technical call on July 27, 2022, TAI and EPA discussed the proposed RI dataset included as Attachment 2 to the RTC. On September 1, 2022, TAI provided EPA a set of maps showing locations with data TAI has proposed to include in the

upland RI dataset and data TAI has proposed to exclude from the dataset. TAI is awaiting EPA's input regarding the proposed RI dataset.

2019 Phase 3 Sediment Study

- Draft Phase 3 Sediment Study Data Analyses Technical Memorandum – TAI presented results of additional bioassay analyses and concentration-response modeling during a call with EPA's technical BERA team on July 20, 2022 and provided the presentation materials and a file containing additional modeling results for EPA's review (this information was provided to EPA on July 20 and on July 26, respectively). TAI is awaiting EPA's feedback regarding the additional Phase 3 bioassay data analyses. TAI and EPA held a technical call on September 7, 2022 to review the additional Phase 3 benthic macroinvertebrate community assessment data analyses TAI has completed in response to EPA's comments on the tech memo. TAI provided data files and the summary slides presented on the call to EPA on September 9, 2022.
- EPA Split Sample Reports
 - TAI received the final version of EPA's Phase 3 Sediment Study Inter-Laboratory Split Sediment and Porewater Chemistry Comparison and Evaluation on September 8, 2022. TAI has uploaded this final report to the UCR RI/FS online database.
 - TAI is awaiting the final version of the following report related to Phase 3 Sediment Study split sample analysis: the EPA Data Verification and Validation Report for the U.S. Geological Survey Columbia Environmental Research Center bioassay chemistry split sample data. Upon receipt, TAI will upload the final report to the UCR RI/FS online database.

TAI-EPA Upland Operable Unit RI/FS Workshop Coordination – A call was held between EPA and TAI on September 19, 2022 to plan and discuss objectives for the technical workshop that will be held between TAI and EPA on November 1, 2022.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4515.